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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 747,850	12 21 2000	Martin Jager	99 044NUT	4425

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ProPat LLC
2912 CROSBY ROAD
Charlotte, NC 28211

08 23 2002

EXAMINER

PRATT, HELEN F

ART UNIT	PAPER NUMBER
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1761

17

DATE MAILED: 08 23 2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/747,850

Applicant(s)

JAGER ET AL

Examiner

Helen F. Pratt

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

Notwithstanding to what extent the foregoing statements are true, the applicant hereby declares that the information furnished herein is true and correct to the best of his/her knowledge and belief, and that the applicant is not aware of any information which might materially affect the examination of the application.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information on PTO-944 (Patent Cooperation Treaty)
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2, 4, 5, 6, 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 2, 4, 5, 6 is indefinite in the use of an incorrect Markush grouping in the use of the phrase "selected from one or more of the following". The correct phrase is "selected from the group consisting of. ". Also, the claims should not contain parenthesis. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948);

recites the broad recitation "polysaccharides" and the claim 4 also recites "hydrolyzed

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starches, microbial polysaccharides, "etc....", which is the narrower statement of the range/limitation, claim 5 recites "plant fibers" which is the broad recitation and then "wheat fibers, Citrus fibers etc". which is a narrower recitation, claim 6 recites " nutrients", which is a broad recitation and then recites "vitamins, minerals", etc. which are a narrower recitation of the broad limitations. Carotenoids and flavonoids are also narrower limitations which should be removed or put in dependent claims.

Claim 11 is indefinite in that there is no antecedent basis in the claim for the phrase "then freeing it from solvents or dispersion media". Also, claim 11 depends on claim 1, but the process will not make a product which contains a core surrounded by an active substance which is encapsulated by a shell forming substance because claim 11 requires that the active substance is mixed with the shell-forming substance and claim 1 requires that the active substance is encapsulated by the shell forming substance.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al.

Ueda et al. (Ueda et al., "Preparation of a core-shell type emulsion containing a biologically active substance", *Journal of Pharmaceutical Sciences*, 1988, 77, 1000-1004) discloses a core-shell type emulsion containing a biologically active substance later (abstract). The core can be made of a biologically active substance

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combined with a filler such as the crystalline cellulose and gums and then coated with chitosan and a fatty material to make a shell (col. 3, lines 65-68 and col. 4, lines 11-70).

The fiber is considered to be the crystalline cellulose as cited in claim 5. The biologically active substance can be vitamins, minerals, antibiotics (claim 6)

Claims 1, 2, 4, 5 and 6 differ from the reference in whether the chitosan is a shell forming material. However, it is known to be a polysaccharide derivative as in claim 4 which can be a shell forming material. Therefore, it would have been obvious to make the composition as claimed.

Claim 3 requires that the shell substance form a stable complex with the core material or active substances. As the claimed composition has been shown it is seen that there is a stable complex, particularly as the composition remains intact all the way to the abomasum (abstract). Therefore, it would have been obvious to make a stable composition.

Claim 7 requires that the food component is a spherical or polygonal shape and is from 1 micron to 200 microns in size and claim 8 that the core content is from 10-90% in weight and claim 10 that the shell material is a particular amount. A sphere is disclosed in col. 4, lines 41-49, and the size can be from 5.5 mm to 5 mm (col. 6, lines 11-18). The coating can be from 10 to 60% which would allow for the core content to be within the claimed amounts. Therefore, it would have been obvious to make the product in a spherical shape in the claimed size with the claimed core content and coating

Claim 9 requires particular amounts of the biological substance which is seen as being within the skill of the ordinary worker to vary depending on the type of active ingredient. Therefore, it would have been obvious to make a composition containing particular amounts of ingredients.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 6 are rejected under 35 U.S.C. 102(a) as being anticipated by Ghani .

Ghani discloses a core material of corn cob which is coated with a biologically active substance (enzymes- claim 6) and encapsulated by a shell forming material as in claim 1, the dietary fiber is cellulose (as in claims 2 and 4 , i. e. corn cob material) (abstract and col. 5, lines 45-60).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8 and 9, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ghani (6,120,811).

cob cellulose (abstract and col. 5, lines 45-60). Claims 8, 9 and 10 further require

particular core contents and particular amounts of active substances and shell contents. It would have been within the skill of the ordinary worker to determine the claimed amounts based on the particular ingredients. Therefore, it would have been obvious to use particular amounts of ingredients to make the claimed composition.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ghani as applied to claims 1, 2, 4, 8, 9, 10 above, and further in view of Ardaillon et al.

Ghani discloses a process of making a microgranular enzyme by combining ground corn cob (cellulosic material) with liquid cellulase and a binder which is hydrolyzed starch to make granulates and then coating with xanthan gum. Claim 11 differs from the reference in the steps of mixing the biologically active substance into the shell forming substance and then adding the fiber and in freeing the mixture from solvent. However, Ardaillon et al. disclose that it is known to mix an active substance into the coating material (shell) (col. 3, lines 16-24). No solvent materials are cited for removal. Therefore, it would have been obvious to add the active substance to the shell material for its known function and then at the cellulosic material as shown by Ghani.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen F. Pratt whose telephone number is 703-308-1978. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

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number for the organization where this application or proceeding is assigned is 703-305-7718.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

Hp 6-6-02

H. Pratt
HELEN PRATT
PRIMARY EXAMINER